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Mark Watson

By

Mark Watson

Application No.

09/681,790

Confirmation No. :

1728

**Appellant** 

Jean Pierre DeVries

Title

A SYSTEM AND METHOD FOR SHARING MATCHED

FEB 1 3 2008

INTERESTS WITHOUT DISCLOSING NON-SHARED

**INTERESTS** 

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# REPLY BRIEF UNDER 37 CFR 41.41(a)(1)

This Reply Brief is in response to the Examiner's Answer dated December 5, 2005.

### I. STATUS OF CLAIMS

- 1. Claims 1 through 23 represent all claims currently pending in the application.
- 2. Claims 1 through 23 are rejected.
- 3. The rejection of claims 1-23 is hereby appealed.

## II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- a. Claims 1-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,112,181 by Shear et al. ("**Shear**") in view of U.S. Patent 5,926,812 by Hilsenrath et al. ("**Hilsenrath**").
- b. Claims 10-16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,112,181 by Shear et al. ("Shear") in view of U.S. Patent 5,926,812 by Hilsenrath et al. ("Hilsenrath").
- Claims 17-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,112,181 by Shear et al. (hereinafter "Shear") in view of U.S. Patent 5,926,812 by Hilsenrath et al. (hereinafter "Hilsenrath").

#### III. ARGUMENT

## a. Reply to Examiner's Characterization of Claimed Subject Matter:

In Section (5) of the Examiner's Answer dated December 5, 2005, the Examiner suggested that the Appellant's characterization of claim 1 is in error. In particular, the Examiner suggests that the Appeal Brief is deficient as to claim 1 because:

"Appellant's summary contends that partial disclosures of interests are claimed in the language of claim 1. However, claim 1 is merely a comparison matching system without 'partially disclosing [any] interests (Appellants brief pages 2-4)."

Appellant respectfully suggests that the Examiner's characterization of claim 1 is in error, and that the aforementioned "partial disclosures of interests" are inherent in the language of claim 1.

Specifically, claim 1 recites the following elements:

- progressively comparing each interest...
- terminating the progressive comparison... wherein specific interests do not partially match any interests
- <u>continuing the progressive comparison</u> for specific interests... wherein the specific interests do <u>partially match</u> any interests...

Appellant describes the progressive comparison of interests throughout the specification as a turn-based partial disclosure of interests wherein the partially disclosed interests are compared as they are partially disclosed.

In support of this observation, Appellant offers paragraphs [0009] though [0012] of the specification, which describes and defines the concept of a "progressive comparison" as follows:

"The present invention... automatically determining matched interests between two or more entities and disclosing those matches without disclosing non-matched interests... Specifically, interests are matched by automatically *progressively comparing* the interests of each entity...

"In general, the basic idea of the present invention is to provide a method for allowing automatic disclosure of at least one common interest between at least two entities while keeping non-common interests undisclosed or secret from other entities..."

"... each interest is compared, one bit or character at a time, by disclosing one bit or character at a time for each interest. Then, in one embodiment, as soon as the comparison indicates that one bit or character of an interest of a first entity does not match any other interests of any other entity, the comparison is terminated with respect to the interest being compared. Consequently, where the comparison is terminated, the interest being compared is not completely disclosed. However, the comparison continues for as long as each bit or character continues to match one or more interests of another entity, with bits being disclosed only to those entities where there is a continuing partial match." (emphasis added)

Furthermore, it should be appreciated that the claims are to be interpreted in light of the specification. To the best of Appellant's knowledge, the term "progressively comparing" or "progressive comparison" is not a term of art that has been used outside of the Appellant's specification. Consequently, this term should be interpreted within the

clear meaning and definitions provided by the specification rather than attempting to define the term in ways that are wholly inconsistent with the specification.

In fact, when combined with the additional claim elements of "terminating the progressive comparison" when there is not a partial match of interests, and only "continuing the progressive comparison" when there is a partial match, it should be clear that the claimed partially comparing interests inherently includes the partial disclosure of interests which only continues for so long as there is a continuing match between the partially disclosed interest. In particular, it should be noted that the Appellant specifically claims "terminating the progressive comparison... wherein specific interests do not partially match any interests." This termination of the progressive comparison is specifically defined in the specification, in paragraph [0012], which explains "where the comparison is terminated, the interest being compared is not completely disclosed." Clearly, if a specific interest is not completely disclosed, then it follows that there has only been a partial disclosure of that interest.

Consequently, it should be clear that the claimed element of "progressively comparing each interest" inherently includes the partial disclosure of interests described by the Appellant in the Appeal Brief and clearly defined by the Appellant in the specification of the patent application. Consequently, Appellant respectfully suggests that the Appeal Brief is not deficient with respect to claim 1.

# b. Reply to Examiner's Response to Arguments:

In Section (10) of the Examiner's Answer dated December 5, 2005, the Examiner stated that the Appellant's arguments with regard to the claimed subject matter begin on the last paragraph of page 11 of the Appellants Appeal Brief, and suggests that it would "squander the Board's time" to consider the Appellant's arguments prior to that point in the Appeal Brief. The Appellant respectfully disagrees with this contention.

In particular, the Appellant's arguments with regard to the claimed subject matter begin on the last paragraph of page 8 of the Appeal Brief, as clearly indicated by the section header on page 8 entitled "VII. ARGUMENT". Appellant believes that a full consideration of the Appellant's entire argument will not in fact "squander the Board's time," and will serve to clarify issues that the Examiner has raised in rejecting the claims.

In particular, the Examiner has suggested that the Appellant has placed undue emphasis on the term "value chain" is arguing against the rejections of the claims. However, as explained in the Appeal Brief on pages 8-11, the Examiner introduced that term from the **Shear** patent in order justify his rejection of the claims. Specifically, on page 3, paragraph 2, of the final rejection, the Examiner dismissed the Appellant's arguments with respect to the issue of progressive comparisons as follows:

"The applicant further argues that neither reference teaches a progressive comparison of the interest wherein upon analyzing of certain matches the comparison is terminated and then continuing the progressive matching (applicant's response pages 8- 13). The examiner respectfully disagrees. Shear provides for a comprehensive system that can provide for matching for value chains wherein match rule sets can be provided utilizing artificial intelligence or smart agents to carry out applicant's features (column 15-20). Hilsenrath also teaches that the process of matching entries is carried out until the desired number is obtained (column 11)." (emphasis added)

The Examiner has clearly explained that **Shear's** use of "matching for **value chains**" acts to "carry out the applicant's [claimed] features." Consequently, in arguing against the rejections advanced by the Examiner, it is clearly appropriate for the Appellant to explore the meaning of the term **value chain** as used by the Examiner in rejecting the claims, as used in the **Shear** reference, as commonly used in conventional

business practices, and as explicitly defined by the inventor named in the **Shear** reference in his testimony before Congress.

As such, Appellant respectfully suggests that in contrast to the Examiner's stated position, it will not "squander the Board's time" to consider the Appellant's entire argument and the evidence presented in support of that argument.

### (1) Reply to Examiner's Discussion of the Subject Matter of Claim 1:

In Section (10)(a) of the Examiner's Answer dated December 5, 2005, the Examiner characterized the Appellant's claimed subject matter by suggesting that:

"Appellant further defines this [progressive comparison-based] matching mechanism '[i]n the most general case, any string of bits representing interests is compared against any other string of bits.' Id. at 0045."

Appellant respectfully suggests that this is a gross oversimplification of the claimed invention, and that the cited text of the Appellant's specification is only partially quoted, and as such is taken out of context. In particular, paragraph [0045] of the Appellant's specification explains that:

"In the most general case, any string of bits representing interests is compared against any other string of bits *using the methods described below in order to determine whether the strings match.*" (emphasis added)

The method described in the following paragraph that corresponds to claim 1 is recited below. Specifically, paragraph [0046] of the specification explains:

"In one embodiment, as soon as the comparison indicates that the hashed interest of a first entity does not match any other hashed interest of any

other entity, the comparison is terminated with respect to the hashed interest being compared. For example, in the case of single bit or character comparisons, as soon as one bit or character of an interest of a first entity does not match any other interests of any other entity, the comparison is terminated with respect to the interest being compared. Consequently, where the comparison is terminated, the interest being compared is not completely disclosed. However, the comparison continues for as long as each hashed interest, or each bit or character continues to partially match one or more interests of another entity, with hashes, partial hashes bits, or characters being disclosed only to those entities where there is a continuing partial match."

Clearly, this above described embodiment corresponds to the elements of claim 1. Consequently, it is inappropriate to characterize the claim as "any string of bits representing interests is compared against any other string of bits" as suggested by the examiner.

The Examiner then generally recites a list of various things that are compared by the Shear reference followed by the blanket statement that "[i]t is axiomatic that a progressive matching of various sets of data must occur before any kind of match or non-match can be determined." Appellant disagrees with this general statement, and suggests that the Examiner has not proven this point or provided any evidence in support of this contention. The Examiner then follows this statement by suggesting that **Shear** discloses a range of matching engines that are generally equivalent to various embodiment of the Appellant's invention.

For example, the Examiner states that **Shear** discloses the Appellant's "hierarchical" and "push/pull" matching techniques by equating paragraph [0052] of the Appellant's specification with column 33, line 48 to column 34, line 65 of the **Shear** reference, and by equating paragraph [0050] of the Appellant's specification with column 54, lines 15-44 of the **Shear** reference. However, these comparisons are not

relevant to the subject matter of claim 1, as the material cited by the Examiner here describes only various uses of the invention without addressing the manner in which those uses are preformed. Consequently, Appellant will not address these immaterial comparisons further.

Next, the Examiner suggests that "[a]Ithough Shear does not utilize the terms 'progressive matching,' he describes sequences of matches and/or nested matches, grouping of matches and even the cluster analysis provided by Hilsenrath (Shear: column 16, lines 55-65; column 42, lines 6-26)."

Appellant respectfully suggests that the "sequences of matches and/or nested matches, grouping of matches and even the cluster analysis" described by **Shear** in column 16, lines 55-65, and in column 42, lines 6-26 fail completely to describe the Appellant's claimed invention.

In particular, in column 16, lines 55-65, **Shear** explains:

"Allows trading companies to match suppliers of certain classes of goods and/or services with those who desire to purchase and/or use those classes of goods and/or services, wherein such matches may include fulling a commercial business interaction and may further include one or more sequences of matches and/or nested matches (a sequence and/or grouping of matches within a given organization or group, wherein such matches may be required to occur in a certain order and/or participate along with other matches in a group of matches before a given match is fulfilled)."

It should be clear that the "matching" described by **Shear** in the above-quoted text does nothing to disclose the Appellant's claimed invention relating to **progressive comparisons** between sets of interests. In fact, the cited text appears simply to describe one possible use for the system described by **Shear**.

Similarly, in column 42, lines 6-26, Shear explains:

"The FIG. 21 example cluster analysis process is one example of steps that may be performed as part of the 'apply classification method(s)' block 1846, 1846' of FIGS. 18, 19. (A classification method, or any other method described in these processes, may be utilized as part of a 'knowbot', 'agent', 'traveling agent', and/or 'smart agent', a non-limiting example of which is described in 'Ginter et al', for example, FIG. 73.) In this particular example, the process selects variables and cases (blocks 1860, 1862, FIG. 21), and then assembles an appropriate data matrix (block 1864). A conventional cluster analysis is then applied (block 1866, FIG. 21). The clusters may be interpreted to determine what they mean (FIG. 21, block 1868), or they may be compared with previous results and if sufficiently similar, they may be assumed to reflect the same classes as the earlier classification procedure thus minimizing the need for additional interpretation of the clustering results. Step 1868 may be performed automatically or manually, or a combination of automatic and manual processing may be used. Finally, individual cases may be assigned to individual clusters to complete the classification process (FIG. 21, block 1870).

It should be clear that the "cluster analysis" described by **Shear** in the abovequoted text does nothing to disclose the Appellant's claimed invention relating to **progressive comparisons** between sets of interests.

The Examiner then continued by suggesting that the *Hilsenrath* reference showed "that progressive cluster and comparison matching of data are old and well known in the art." The Examiner offered column 4, lines 29-32; column 8, lines 28-64; column 11, lines 15-56; and column 12, lines 19-32 of the *Hilsenrath* reference in support of this contention. However, as discussed below, none of the cited text in any way renders the Appellant's claimed invention obvious.

In particular, column 4, lines 29-32, Hilsenrath explains:

"The interest profile clusters are then compared with the selected database document clusters to determine which of the selected database match the interest profile."

It should be clear that the comparison of clusters of information described by Hilsenrath in the above-quoted text does nothing to disclose the Appellant's claimed invention relating to progressive comparisons between sets of interests.

Similarly, in column 8, lines 28-64, *Hilsenrath* explains:

"For example, if the initial word is 'mountain', then a procedure will examine the weighted word histogram and return a list of other words within a predefined number of words to the right and left of each appearance of 'mountain'. This predefined number of words is called the breadth. Suppose it found two such words: 'bike' and 'trail'. The procedure is then called again for each of these two words and returns a list of other words close to 'bike', and a list of other words close to 'trail'. The cluster word list is simply a list of the words found through this recursive procedure, in this example, 'mountain', 'bike', 'trail', and the others. In the preferred embodiment, the recursive depth is limited to a predefined number called the depth. It is also terminated in the case where no new word is found. There are thus two parameters which are used in determining a cluster word list: the breadth of the search and the depth of the search. The breadth is a measure of how closely positioned words must be, and the depth is a measure of the maximum number of degrees of separation (i.e. recursive calls) between the words. If a first and second word are within breadth words of each other in at least one of their appearances, it is said that they are connected.

"If there are N words in the cluster word list, the number of connections matrix contains N x N elements. The (ij) element contains the total number of connections between word i and word j when word i appears before word j. For example, if 'mountain bike' appears ten times in a document, then the number of connections of 'mountain' to 'bike' is at least ten. Note that this number is usually different from the number of connections of 'bike' to 'mountain' since the order of the words is taken into account. Accordingly, two words are considered to be closely associated with each other if their number of connections in one order differs from their number of connections in another order. The total number of connections in either order, of course, also indicates that they are closely associated."

It should be clear that the comparison of clusters of words to determine the relationships between specific words described by *Hilsenrath* in the above-quoted text fails completely to disclose the Appellant's claimed invention relating to *progressive comparisons* between sets of interests.

Similarly, in column 11, lines 15-56, *Hilsenrath* explains:

"For each cluster received from the local module, the network module creates a series of search strings of varying degrees of scope, as follows. A number M of most important words in the cluster is found by selecting those words from the cluster word list which have traits reflecting higher significance, e.g. a score larger than a predetermined threshold value. Alternatively, they could be chosen by how many appearances they have in the document, or by some combination of score and number of appearances that correlates with importance. These M important words,  $W_1, W_2, \ldots, W_{M-1}, W_M$ , can be combined to produce search strings varying from narrow to broad, as follows:

[search strings omitted from quoted material]

"Other search strings can also be created using connectives such as 'near'. These connectives could be used, if necessary, to form strings of more or less restrictive scope.

"The search strings are submitted to the search engine as follows. First, the most narrow string,  $S_1$ , is submitted to the engine and the document references, e.g. uniform resource locators (URLs), for the matches are added to a list of preliminary search results. If the number of document references in the list is less than a predetermined number of desired document references, then the next search string,  $S_2$ , which is slightly broader in scope than  $S_1$ , is submitted to the search engine. Any new document references that have not already been found are added to the list. If the number of document references in the list is still less than the predetermined number, then the next string,  $S_3$ , is submitted and the new document references are added to the list. This process continues until the desired number [of] document references is obtained."

It should be clear that the search process described by *Hilsenrath* in the above-quoted text operates to identify a "desired number [of] document references" based on word scores computed as a function of the relationships between specific words.

Clearly, this score-based word search fails completely to disclose the Appellant's claimed invention relating to *progressive comparisons* between sets of interests.

Next, in column 12, lines 19-32, *Hilsenrath* explains:

"After the network module has obtained clusters for the database documents retrieved, it then eliminates irrelevant documents by comparing the database clusters with the interest profile clusters and retaining only those documents whose clusters are sufficiently similar to one of the profile clusters. The network module determines similarity of clusters in the same way as the local module, just as described in detail above. A

database document is discarded as irrelevant if, when its clusters are compared with the interest profile clusters, the similarity measure is never above a predefined minimum threshold.

"In another embodiment, the search engine is adapted for searching based directly on cluster data rather than search strings."

As with the previously quoted text, it should be clear that the search process described by *Hilsenrath* in the above-quoted text operates to identify a "desired number or document references" based on a "similarity measure" associated with particular "interest profile clusters". Clearly, this similarity-based cluster search fails completely to disclose the Appellant's claimed invention relating to *progressive comparisons* between sets of interests.

Finally, the Examiner reiterated his point that "the examiner provided the Hilsenrath reference to show that such a progressive comparison is old and well known in the art, as evidenced by the inclusion of the cluster analysis in the Shear reference as indicated above. In fact, *Appellant concedes as much in pages 14-15 of the brief*, yet indicates that Hilsenrath fails to disclose Appellant's claimed 'partial disclosure.'" (emphasis added)

Appellant respectfully disagrees, and suggests that the Examiner has clearly misinterpreted the Appellant's arguments. Specifically, Appellant has **not** conceded that the **Hilsenrath** reference shows that "a progressive comparison is old and well known in the art." In particular, in the final Office Action, the Examiner explained that, column 11 of the **Hilsenrath** teaches that **the process of matching entries** is carried out **until the desired number of matches is obtained**. Appellant agrees. **Hilsenrath** does teach that **the process of matching entries** is carried out **until the desired number of matches is obtained**. For example, if the user wants to return a total of 10 books having terms matching some provided search criteria, such as the word string "mountain bike," then the **Hilsenrath** reference will continue the search until it identifies

10 separate books having the requested search string. In other words, *Hilsenrath* provides for a plurality of search criteria (e.g., "search strings") which are sequentially executed *until a desired number of matches of unique documents containing the words in the separate search strings have been returned* (see col. 11, lines 5-63). However, as previously explained by the Appellant on pages 14-15 of the Appeal Brief, this is *not* what is described and claimed by the Appellant, and it most certainly is *not* a concession by the Appellant that "a progressive comparison is old and well known in the art."

Consequently, in view of the preceding discussion, and in view of the arguments presented in the Appeal Brief, which are incorporated herein by reference, it should be clear that the arguments presented by the Examiner are not supported by the cited references. As such, it should also be clear that the Examiner has failed to present a prima facie case of obviousness under 35 U.S.C. §103(a) as per claims 1-9.

# (2) Reply to Examiner's Discussion of the Subject Matter of Claim 10:

In Section (10)(b) of the Examiner's Answer dated December 5, 2005, the Examiner suggested claim 10 employs the comparison matching system of claim 1 with the additional step of "partially disclosing interests between at least two unique participants."

The Examiner then suggests that **Shear** does disclose the Appellant's claimed partial disclosure. In support of this suggestion, the Examiner cites various embodiments of the **Shear** reference wherein certain personal of information is withheld from one or more parties based on the confidential nature of that information. However, what the examiner fails to point out with respect to the examples cited below is that the individual parties **fully disclose** their interests to an "electronic matchmaker" that then determines whether there is shared interest and reports those shared interests back to the individual parties. It should be noted that with respect to Appellant's claimed

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invention, there is no full disclosure of non-matched interests to any entity, such as the "electronic matchmaker" described by **Shear**.

In particular, in arguing that **Shear** discloses the Appellant's claimed partial disclosures, the Examiner explains that **Shear** recognizes that "certain personal information must be hidden from a service provider and other parties such as a disability, cancer or HIV infection or any other information deemed secret by the parties (column 9, line 41 - column 10, line 4)."

However, in column 16, lines 55-65, **Shear** explains:

"FIG. 5 shows a simplified example of an *electronic matchmaker* that can match up two people with like interests. Sarah loves hiking, country and western music, gardening, movies and jogging. Mark loves movies, hiking, fast cars, country and western music, and baseball. *The electronic matchmaker can look at the interests, personalities and/or other characteristics of these two people and determine that they are compatible* and should be together--while maintaining, if desired, the confidentiality of personal information. That is, unlike conventional matchmaking services, the *present inventions can keep personal information hidden from the service provider* and all other parties and perform matching within a protected processing environment through the use of encryption and protected processing environment-based matching analysis.

"For example, certain matching of facts that are maintained for authenticity may be first performed to narrow the search universe. Then, certain other matching of facts that are maintained for secrecy can be performed. For example, matching might be based on shared concerns such as where two parties who have a given disability (such as cancer or HIV infection) that is certified by an authority such as a physician who is certified to

perform such certification; or the same income level and/or bank account (as certified by an employer and/or financial authority such as a bank). Some or all of such secret information may or may not be released to matched parties, as they may have authorized and/or as may have been required by law when a match is achieved (which itself may be automatically managed within a protected processing environment through the use of controls contributed by a governmental authority)." (emphasis added)

Clearly, the "electronic matchmaker" system described by **Shear** in the above quoted paragraphs involves **full disclosure** of all of an individuals interests to an "electronic matchmaker." While shifting of this full disclosure to the electronic matchmaker "can keep personal information hidden from the service provider" as explained by **Shear**, it fails to keep a full disclosure of non-shared interests from the electronic matchmaker itself. In stark contrast, with respect to the Appellant's claimed process of partial disclosure based comparisons directly between the parties attempting to find shared interests, there is **no** full disclosure to any entity except with respect to matched interests. Clearly, Shear provides for a **full disclosure**-based matching system with the "electronic matchmaker" then revealing of matched interests to individual parties. This is not a partial disclosure of interests as described and claimed by the Appellant.

Next, the Examiner continued his argument regarding partial disclosures of particular interests by explaining that **Shear** provides a working example of "partially disclosing only relevant data to each party" in column 11, lines 45-67 and column 12, lines 1 - 19.

However, in column 11, lines 45-67, **Shear** explains:

"FIG. 9 shows one way in which the *electronic matchmaker* can get information about a person. In this example, the electronic matchmaker

asks Jill to fill out a computer questionnaire about what she likes. The questionnaire can also ask Jill what information she wishes to be maintained as authentic, and what information (e.g., encrypted by the system) may be used for secure matching only within a protected processing environment and can not be released to another party, or only to certain specified parties. The questionnaire answering process may be directly managed by a protected processing environment to ensure integrity and secrecy, as appropriate.

"Looking at FIG. 10, Jill may have used her computer last week to look at information about baseball, volcanoes and Jeeps. With Jill's permission, the *electronic matchmaker can employ a protected processing environment* 154 (schematically shown here as a tamper-resistant "chip" within the computer--but it can be hardware-based, software-based, or a combination of hardware and software) to look at the computer's history records and use them to help match Jill up with other kinds of things she is or may be interested in. For example, the electronic matchmaker can let an electronic publisher or other provider or information gatherer (e.g., market survey conductor, etc.) know that Jill is interested in team sports, geology and sports utility vehicles with or without more revealing detail--as managed by Jill's choices and/or rights management rules and controls executing in her computer's protected processing environment 154. The provider can send information to Jill--either automatically or at Jill's request--about other, related things that Jill may be interested in.

Clearly, the above-quoted text simply provides another example of a *full disclosure* of interests to the "electronic matchmaker" system described by *Shear*. Consequently, as with the previously discussed material, it should be clear that *Shear* fails to disclose the *partial disclosure* of interests as described and claimed by the Appellant.

Next, the Examiner states that *Shear* indicates that "the system is dynamic enough such that 'partially and/or entirely new variables may be introduced to one or more existing set of variables' in order to change, modify and process characteristics or interests (column 21, lines 20-32)." The Examiner then states that "Appellant's 'interest comparison [software] module' similarly can be programmed to 'compare a sequence of one-way hashes or partial one-way hashes of the interests' or 'individual characters or bits of the hashes,' to determine and disclose matches (specification 0045-0046).

Certainly, any software module can be programmed to carry out any desired task. Consequently, while a talented programmer could potentially program Appellant's "interest comparison [software] module" to "compare a sequence of one-way hashes or partial one-way hashes of the interests' or 'individual characters or bits of the hashes,' to determine and disclose matches," this point is immaterial as this is *not* what is being claimed by the Appellant. In particular, in claim 10, Appellant is claiming a progressive partial disclosure of interests wherein partially disclosed interests continue to be compared before revealing the next part of the interest only for so long as there is a continued match of interests. Consequently, the Examiner's suggestion regarding reprogramming of software modules embodying the claimed invention is not relevant to the present rejection of claim 10.

Next, the Examiner continues to offer examples of **Shear's** alleged partial disclosure capabilities by suggesting that **Shear** explains that "partial disclosure of interests is used to maintain a high degree of confidentiality and privacy by selecting and/or limiting the nature, range and detail of information sent between parties in an organization (column 60, lines 53-67)."

However, in column 60, lines 53-67, **Shear** describes an example of "The Enterprise Distributed Matching and Classification Utility":

"Businesses and other organizations may be concerned with privacy and confidentiality regarding information and/or services used within the

company. This concern may be manifest regardless of whether the information and/or services originated inside and/or outside the organization. Thus some organizations may have strong incentives to take advantage of the present inventions by operating a distributed matching and classification utility 900 to provide matching and classification services within the enterprise while at the same time maintaining a higher degree of confidentiality and privacy by selecting and/or limiting the nature, range, and detail of information sent outside the organization."

Clearly, the above-cited text fails to describe the Appellants progressive partial disclosure-based matching system. In fact, the above-cited text seems to be a simple justification for providing a trusted third party (such as the aforementioned "electronic matchmaker") so that confidential information is kept private by **Shear's** "matching and classification services." Consequently, as with the previously discussed material, it should be clear that **Shear** fails to disclose the **partial disclosure** of interests as described and claimed by the Appellant.

Finally, as in the final rejection, the Examiner again offers "Figure 16(C) and associated text" in support of his contention that the Shear reference discloses the Appellant's claimed invention. However, as discussed in the Appellants previously filed Appeal Brief on pages 17-18, Figure 16C of the **Shear** reference does not provide support for the Examiner's arguments with respect to claim 10.

In particular, Figure 16C of the *Shear* reference provides an example of a "Matching and Classification Commerce Utility System 900 environment consistent with the present invention." *Shear* describes Figure 16C in col. 39, line 66 through col. 40, line 43. Within this cited text, *Shear* explains:

"FIG. 16C shows a still different, more complex Matching and Classification Commerce Utility System 900 environment including elements of both a *hierarchical chain of command* and a high degree of

cooperation in the horizontal direction between different multifunction matching and classification utility systems 900. In this example, there are five different levels of responsibility with a master or overarching matching and classification utility system 900(1) on level 1 having the most authority and with additional matching and classification utility systems on levels 2, 3, 4, and 5 having successively less power, authority, control, scope and/or responsibility. FIG. 16C also shows that different matching and classification utility systems 900 on the same level may have different functions, scopes and/or areas of responsibility."

Clearly, the above-cited text fails to describe the Appellants progressive partial disclosure-based matching system. In fact, the above-cited text seems to describe a hierarchical matching system wherein various node-based "matching and classification utility systems" have different levels of "power, authority, control, scope and/or responsibility." It is clear that the cited text is not disclosing a partial disclosure-based matching system. Consequently, as with the previously discussed material, it should be clear that **Shear** fails to disclose the **partial disclosure** of interests as described and claimed by the Appellant.

Consequently, in view of the preceding discussion, and in view of the arguments presented in the Appeal Brief, which are incorporated herein by reference, it should be clear that the arguments presented by the Examiner are not supported by the cited references. As such, it should also be clear that the Examiner has failed to present a prima facie case of obviousness under 35 U.S.C. §103(a) as per claims 10-16.

## (3) Reply to Examiner's Discussion of the Subject Matter of Claim 17:

In Section (10)(c) of the Examiner's Answer dated December 5, 2005, the Examiner suggested claim 17 is "directed to a computer readable medium of process claim 10." Examiner then states that in the interest of time, the arguments presented with respect to the rejection of claim 10 are relied on with respect to support for the

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rejection of claim 17. Consequently, rather than reiterate the arguments presented above with respect to claims 1 and 10, the Appellant also incorporates those arguments by reference with respect to the rejection of claim 17.

Consequently, in view of the preceding discussion, and in view of the arguments presented in the Appeal Brief, which are incorporated herein by reference, it should be clear that the arguments presented by the Examiner are not supported by the cited references. As such, it should also be clear that the Examiner has failed to present a prima facie case of obviousness under 35 U.S.C. §103(a) as per claims 17-23.

For the above reasons, it is believed that the rejections of claims 1-23 advanced in the final office action should be vacated.

Respectfully submitted,

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